



DEPARTMENT OF THE NAVY
NAVAL RADIO STATION SUGAR GROVE
SUGAR GROVE, WEST VIRGINIA 26815

IN REPLY REFER TO

80/TMC/jmw
5750-
8 March 1976

From: Commanding Officer, Naval Radio Station (R), Sugar Grove
West Virginia
To: Director of Naval History (OP-09B9) Washington Navy Yard,
Washington D.C. 20390
Subj: Command History
Ref: (a) OPNAVINST 5750.12B of 20 May 1971
(b) NAVCOMMSTA Norfolk Inst 5750.1A of 15 June 1975
Encl: (1) Annex I - Copies of Area Data, Summary of History and Mission
(2) Annex II - Copies of Newspaper Articles on Opening of Station.

1. In accordance with references (a) and (b), the following information is forwarded for inclusion in the Command History for the period of 1 January 1975 to 31 December 1975.

(1) Command Organization

(a) LCDR Donald Justice was Officer-in-Charge from 1 January 1975 to 1 July 1975 when he became Commanding Officer. He was Commanding Officer from 1 July 1975 until 29 August 1975, at which time he retired from active service. LCDR Thomas M. Coleman relieved LCDR Donald Justice as Commanding Officer on 29 August 1975.

(b) The mission of the station underwent a change from the secondary receiver facility for NAVCOMMSTA Norfolk to the primary receiver facility beginning on 10 November 1975.

(c) Command structure was changed on 1 July 1975 when Naval Radio Station (R), Sugar Grove administratively changed from a fifth echelon command to a fourth echelon command.

(d) There has been no changes in location of headquarters.

(2) Summary of Operations

19 February KOI-16 (Card Reader) was installed in the Ship/shore facility at the operations site for test and evaluation. The test and evaluation was completed on 1 July 1975 with excellent results.

08 April Naval Radio Station (R), Sugar Grove received its I.G. Inspection held by COMNAVTELCOM. This inspection was completed on 9 April 1975. The overall results of the inspection were satisfactory.

10 May At 1558, during a severe electrical storm, lightning struck the commercial power lines feeding the operations site. As a result, 43 multicouplers in Wullenwebers #1 and #2 sustained major damage, the air conditioning plant main ventilation system was disabled, and damage was done to the CO2 fire fighting system. Vital communications were restored in twenty minutes. The station was fully operational at 2335.

27 May Approval was received from COMNAVTELCOM to remove the 4 RLPA antennas. They were dismantled on 24 and 25 June and shipped to project Clarinet Betty.

02 June The Auto/Hobby Shop was officially opened, but the overall project had not been completed and additional construction would extend into 1976.

18 June The RLPA site north of the operations building was designated as a helicopter landing pad and will be used for helicopters to convey supplies and personnel to both the Naval Radio Station and the Security Group Detachment.

01 July Naval Radio Station (R), Sugar Grove was changed from a fifth echelon command as a department of NAVCOMMSTA NORFOLK to a fourth echelon command. The official title of the senior officer at the station was changed from Officer-In Charge to Commanding Officer.

01 July The Naval Research Laboratory facility officially closed down its operations at Sugar Grove and turned all of its assets over to the Security Group Detachment at Sugar Grove, West Virginia.

08 July An inspection of the Bachelor Enlisted Quarters was conducted in connection with the Admiral Zumwalt Award for BEQ's. The areas covered by the inspection team included administration, habitability, management and custodial. The station received a 74.25% overall rating.

18 August Rear Admiral R.E. Rumble, Commandant of the Fifth Naval District, toured the station for orientation and familiarization with the facilities and capabilities of the station.

29 August A joint change of command and retirement ceremony was conducted by Captain Harry C. Rockefeller, Commanding Officer, NAVCOMMSTA Norfolk. LCDR Thomas M. Coleman relieved LCDR Donald Justice as commanding officer of Sugar Grove, Naval Radio Station. LCDR Donald Justice retired after twenty-seven years of active Naval service and received a letter of appreciation.

18 September The three conical monopoles located at the operations site were removed and surveyed.

11 October Naval Radio Station Sugar Grove held a Navy Day Open House for the civilian community. Approximately 100 persons toured the operations and support sites. —

10 November Under the coordination of the Tech-Control Facilities, NAVCOMMSTA Norfolk, Naval Radio Station Sugar Grove assumed the communications requirements formerly under the control of the receiver facility at Northwest Virginia.

03 December Twenty volunteers lead by LT (jg) Stout departed the station at 1315 in the firetruck to aid local fire authorities in controlling a forest fire in Brandywine, West Virginia. The fire was brought under control and the fire party returned to the station at 1930.

10 December Fifteen AN/FRR-60 (V) receivers were excessed and removed from operations to be used as spare parts for future operations.

15 December Construction began on the bowling alley and gymnasium for use by all station personnel. The bowling alley construction will be completed by March 1976.

T. M. COLEMAN
LCDR USN

Copy to: NAVCOMMSTA NORVA

SECTION III - AREA DATA

Naval Radio Station (R) Sugar Grove is situated in the South Fork Valley in Pendleton County, West Virginia.

The area is sparsely populated and a mountainous farming area with no other industry in the immediate area. The population of Pendleton County is 7,031 and the communities located near the station are small. These communities are Sugar Grove (pop. 42) 5 miles south, Brandywine (pop. 188) 5 miles north and Franklin (pop. 695) 17 miles northwest. The nearest large town that provides adequate shopping and recreational facilities is Harrisonburg (pop. 14, 605) which is 35 miles east over the mountain.

There are no zoning laws for Pendleton County but the area is designated a National Radio Quiet Zone which protects the station from harmful interference. The "Zone", Sugar Grove is approximately in the center, is some 3500 square miles which the State of West Virginia has legislated to prohibit electrical encroachment (House Bill #2, 9 August 1956; Radio Astronomy Zoning Act").

The average annual temperature of the area is 52.8 degrees. The maximum temperature, recorded in September, 1953, was 97 degrees and the minimum temperature, recorded in February 1963, was minus 22 degrees. The average yearly rainfall is 32.14 inches and the average yearly snowfall is 71.9 inches. The prevailing wind is northwest at 6.3 miles per hour.

The installation is located on Pendleton County Road 21 which is a narrow two lane winding road. The nearest major highway, U.S. 33, is a distance of 5 miles to the north. There are no buses, trains, or airfields in the immediate vicinity. The nearest bus line terminal (Greyhound) is located in Harrisonburg, Virginia, a distance of 35 miles to the east over the Shenandoah Mountains. Shenandoah Valley Airport is located at Weyers Cave, Virginia, which is south-east of the station a distance of 46 miles.

The Naval Radio Station is adjacent to the west side of the George Washington National Forrest and camping and fishing are available at the Brandywine Recreational Area in the Forrest 8 miles from the station. The Monongahela National Forrest, with four recreational areas, is located to the west of the station. The nearest point of the Forrest is approximately 25 miles from the station. The following state parks and forrests are located within 65 miles of the base; Calvin Price, Watoga, Cannon Valley, Lost River, Seneca and Kombrabow.

Installation Data

Improvements

Base Population

	Navy	
	Allowance	On Board
NAVRADSTA	70	55
NAVSECGRUDET	49	49
Total	<u>119</u>	<u>104</u>

	Civilian
NAVRADSTA	16 permanent
NRL	<u>13 permanent</u>
Total	29

Dependents

109 military dependents reside on station.

Operating Costs

NAVRADSTA

	<u>FY 72</u>	<u>FY 73</u>	<u>FY 74</u>
O&M	49,000.00	66,800.00	70,100.00
Utilities	78,860.00	84,700.00	91,000.00
Civ. Labor	179,600.00	181,500.00	184,000.00
Mil. Labor	345,600.00	348,000.00	350,000.00
Total	<u>\$653,060.00</u>	<u>\$681,000.00</u>	<u>\$695,100.00</u>

NAVSECGRUDET

O&M	69,500.00	71,100.00	69,800.00
-----	-----------	-----------	-----------

The work at NRL Sugar Grove is primarily under NRL Problem 79R06-30. The budget for NRL Sugar Grove is interrelated with that of the Space Systems Division, NRL Washington, D.C. and a meaningful breakdown is not available.

SECTION IV - HISTORY

In 1956 the present site of Naval Radio Station (R) Sugar Grove was selected for a Naval Research Laboratory project leading to moon relay communications as well as other research, communications and [redacted] function. In 1957 a 60 ft. parabolic antenna had been erected for a prototype for a 600 ft. parabolic reflector. In 1962 a review indicated that advances in science and technology, not foreseen earlier, had reached the stage where project objectives could be achieved at less cost by other means so construction of the 600 ft. reflector was halted.

The inadequacies of the Cheltenham, Maryland Radio Receiving Facility due to upcoming urban encroachment were recognized officially in 1950 by the Chief, Bureau of Ships who recommended relocation of the entire facility. Insufficient funds prevented CNO action at the time.

In September 1962, SECNAV proposed to SECDEF that Sugar Grove Site be utilized for a Naval Radio Receiving Station in lieu of like facilities at Cheltenham, Maryland, in order to utilize part of the plant investment of the cancelled NRL project and to take advantage of the unique potential of the site; namely the National Radio Quiet Zone.

In February 1963 the Naval Radio Station (R) Sugar Grove, was established in a development status. On 20 December 1968 the U.S. Navy officially occupied the new communications site and the station was formally commissioned 10 May 1969.

SECTION V - MISSION

Naval Radio Station (R) Sugar Grove. As an activity of the Naval Communication System, to manage, operate and maintain those facilities, systems, equipments, and devices necessary to provide requisite communications for the Command, operational control, and administration of the Naval Establishment; to manage, operate and maintain those facilities of the Defense Communications System as assigned; and to perform such other functions as may be directed by the Chief of Naval Operations.

Naval Security Group Detachment, Sugar Grove. As an activity of the Naval Communications System, to manage, operate and maintain those facilities, systems, equipments, and devices necessary to provide requisite communications for the Command, operational control, and administration of the Naval Establishment; to manage, operate and maintain those facilities of the Defense Communications System as assigned; and to perform such other functions as may be directed by the Chief of Naval Operations and Commander Naval Security Group Command.

Naval Research Laboratory Sugar Grove. As an activity of the Naval Research Laboratory Washington, to conduct experimental research and development concerning operational utilization of information, systems and techniques in radio physics as related to the space sciences.



AP Wirephoto

Navy's 'Ear' Is Activated in West Virginia

SUGAR GROVE, W. VA. (UPI) — The Navy's \$11 million radio receiving station was officially activated yesterday in ceremonies at this remote, mountainous section of eastern West Virginia.

The facility will serve as the Navy's "ear," gathering communications from Navy planes, ships and stations around the world.

Two 1,000-foot-diameter, dish-shaped antennas are located in a 100-mile-long national radio quiet zone.

The facility will take over much of the work that had been performed at the Navy's Cheltenham, Md., communications station.

The facility here originally was developed in the early 1960s as a site for a radio telescope that would probe outer space, but was obsolete before it could be completed. In March 1965, work was begun at the site to convert it for use by the Navy.

The receiving equipment is in an underground operations building.

The station, with 108 Navy men and 30 civilians, is the largest military installation in West Virginia.

A Victory for Navy, This Time on Land

The Navy yesterday activated its \$32.5 million global radio communications center at Sugar Grove, W. Va., with a victory celebration rivaling the commissioning of a ship. Sen. Robert C. Byrd, D-W. Va., and other speakers recalled the tough battle they had with congressmen who sought to

scuttle the project. It is, in fact, a kind of stepchild. It was finally approved after opposition in Congress forced the abandonment in 1962 of a \$260 million radiotelescope planned for Sugar Grove. In photo: The center's two 1,000-foot wide antennas are at upper right.

Byrd to Speak At Sugar Grove

SUGAR GROVE — U. S. Senator Robert C. Byrd, D. W. Va., will be the main speaker here Saturday, May 10, at activation ceremonies for the Naval Radio Receiving Station.

Byrd was instrumental in getting the \$11 million-dollar military facility located here.

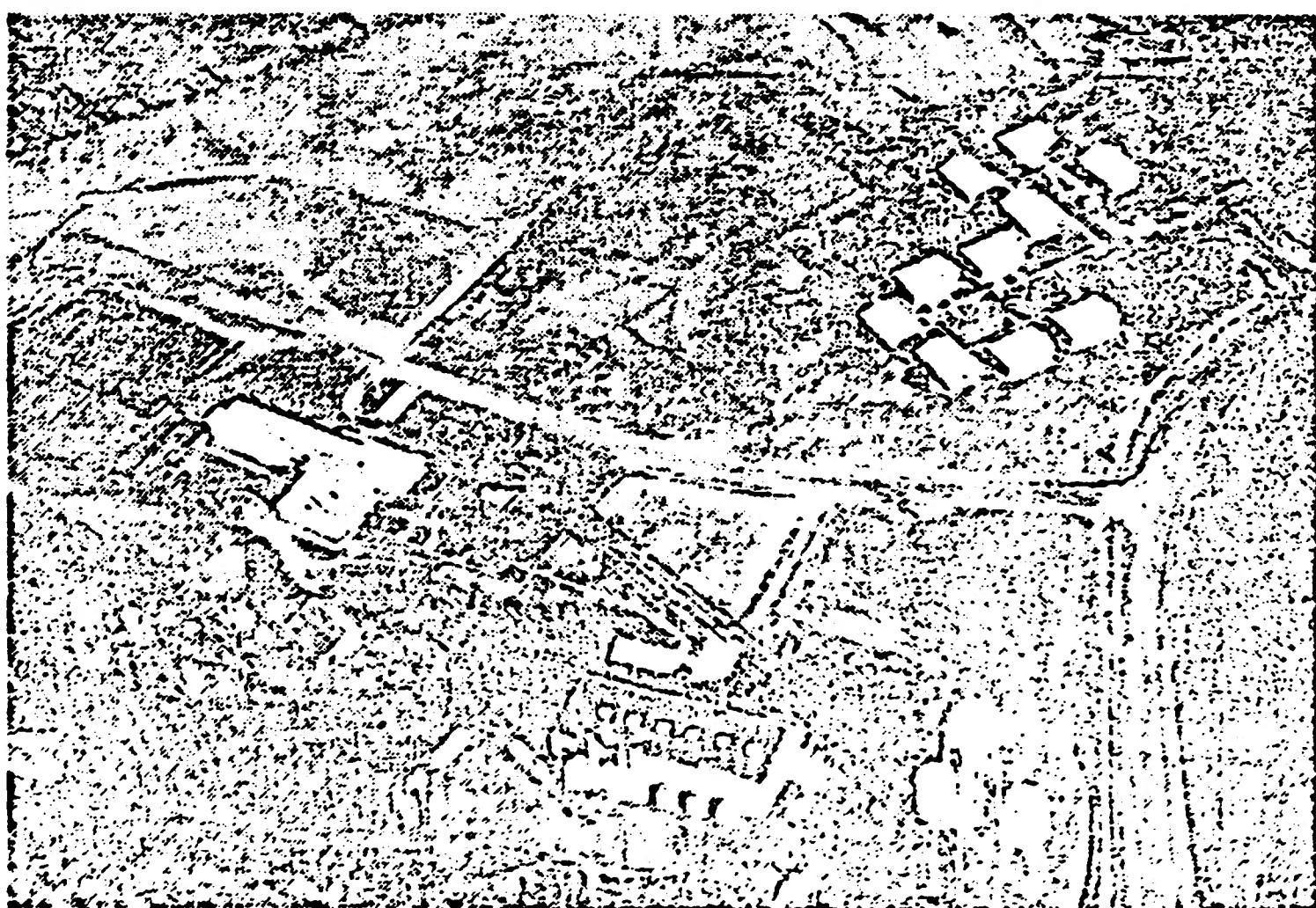
The station, referred to as the "ear" of the Navy, gathers communications from naval planes, ships, and stations around the world.



EXPLANATION OF OPERATIONS at the Naval Radio Station (R) Sugar Grove is given by LCDR Lee E. Barrett, Jr., left, officer in charge to Admiral Thomas H. Moorer, second from left, chief of naval operations.

and Senator Robert C. Byrd during a tour of the installation following the activation ceremony.—Photo courtesy Daily News Record

Page 4 — The Pendleton Times — May 15, 1969



SUPPORT SITE for the Sugar Grove Naval Station, as shown in this aerial photo, includes 20 family housing units, upper right, a maintenance building and water tank, lower

right, and a multi-purpose building left, which houses a 70-man barracks, a galley and messing facilities, a Navy exchange, movie area and administrative offices.



NAVY'S MOUNTAIN BASE—In an aerial photo of the Navy's radio communications center at Sugar Grove, W. Va., the Wullenweber antenna complexes look like the skeletons

of a pair of merry-go-rounds. The antenna, each 1,000 feet in diameter, are the heart of the station. At left is an auxiliary, dish-type antenna.

Officials, Dignitaries At Activation Ceremony

OFFICIAL PARTY

Admiral Thomas H. Moorer, USN, *Chief of Naval Operations*

Dr. Robert A. Frosch, *Assistant Secretary of the Navy Research & Development*

Honorable Robert C. Byrd *U. S. Senator from West Virginia*

William Loy *Representative of Governor A. Moore, Jr. of West Virginia*

Rear Admiral J. C. Dempsey, USN, *Commandant, Fifth Naval District*

Rear Admiral F. J. Fitzpatrick, USN, *Commander, Naval Communications Command, ACNO (Communications)*

Captain M. C. Hartle, USN *Commanding Officer, Communication Station Washington*

Lieutenant J. D. Shannon, USNR, *Chaplain, Naval Communication Station Washington*

DIGNITARIES

Rear Admiral R. H. Weeks, USN, *Vice-Director, DCA*

Rear Admiral J. E. Rice, USN, *Commander, Naval Electronics Systems Command*

Rear Admiral R. E. Cook, USN, *Commander, Naval Security Group Command*

Lt. General H. W. Grant, USAF (Ret) *Director, Telc. Communications Policy, ASD*

Captain J. C. Matheson, USN, *Director, Naval Research Laboratory*

Dr. Alan Rennan *Director of Research, Naval Research Laboratory*

Mr. Fred Korth *Former Secretary of the Navy*

Mr. M. C. Baird *President P&M Systems, Inc.*

Mr. B. H. Oliver, Jr. *Vice President, AT&T*

Activation Order

Naval Radio Station (R) Sugar Grove

"In accordance with OPNAVNOTE 5450, serial 4064 PO9B33 of 6 May 1969, the Secretary of the Navy has approved the change in status of Naval Radio Station (R) Sugar Grove, West Virginia, from developmental to active (fully operational) status as of 10 May 1969.

The mission of Naval Radio Station (R) Sugar Grove, West Virginia, is:

'As an activity of the Naval Communication System, to manage, operate, and maintain those facilities, systems, equipments, and devices, necessary to provide requisite communications for the command, operational control, and administration of the Naval Establishment; to manage, operate and maintain those facilities of the Defense Communications System as assigned; and to perform such other functions as may be directed by the Chief of Naval Operations.'

The Chief of Naval Operations delegates authority and responsibility as follows:

Command and Support: Commander, Naval Communications Command to be exercised through Commanding Officer, Naval Communication Station Washington, Cheltenham, Maryland.

Area Coordination: Commandant, Fifth Naval District or to such other commander as may be designated by him.

Page 3 — The Pendleton Times

— May 15, 1969

When Senator Robert C. Byrd said last Saturday at Sugar Grove that he shared with others a sense of pride in seeing the Naval Radio Receiving Station successfully completed, he surely must have been speaking from the heart. For if anyone ever was justified in taking pride in the completion of a task, Senator Byrd certainly is justified in taking pride in the completion of the Sugar Grove project.

Senator Byrd has worked tirelessly for this project. His interest dates back to August, 1962, when Secretary of Defense Robert McNamara cancelled construction of the "Big Ear" project at Sugar Grove. Byrd immediately set about trying to find some other use that could be made of the site. One of the first things he did was to write to President John Kennedy and ask him to appoint a committee of government engineers and scientists to find the optimum use that could be made of the Sugar Grove site.

It was not long after Senator Byrd wrote to President Kennedy that the Navy hit upon the idea of moving the Naval Radio Receiving Station from Cheltenham, Md., to Sugar Grove. This appeared to be an ideal use for the site because radio interference was beginning to affect the Cheltenham site, and Sugar Grove was in a "radio quiet" zone.

But the move was not without its problems. The first setback occurred in 1963 when the House Armed Services Committee deleted from the Military Construction Authorization Bill the Navy's request for \$3,480,000 to relocate the station. Senator Byrd immediately went to bat for the project. He happened to be a member of the Senate Armed Services Committee, and after preparing a convincing case he succeeded in getting his committee to restore the funds for the project in the bill.

Still later when the relocation of the station was attacked by members of Congress, Senator Byrd answered the critics and defended the Navy's plans to move the station to Sugar Grove. He has worked closely with the Navy and given officers involved in the project strong support.

So, when Senator Byrd told those attending the activation ceremony Saturday that he has watched over, and helped to guard, and protect this undertaking from a legislative standpoint, he was not engaging in idle chatter and he was not boasting. He was stating facts.

Senator Byrd, perhaps more than any other single individual, deserves the credit for bringing to West Virginia its first major military establishment. Certainly he is justly entitled to take pride in this significant achievement, a job well done.

Sen. Byrd Welcomes Navy to W.Va.

Editor's Note—Following is the complete text of the address delivered Saturday by U. S. Senator Robert C. Byrd at the ceremony activating the Naval Radio Station (R) Sugar Grove.

Admiral Moorer, Admiral Demsey, Admiral Fitzpatrick, Captain Hartle, Mr. Loy, distinguished guests, ladies and gentlemen:

I am indeed pleased to participate in this activation ceremony for the Naval Radio Receiving Station Sugar Grove.

From its inception, I have watched over, and helped to guard, and protect this undertaking from a legislative standpoint. I share with each of you a collective pride in seeing this important national defense project so successfully concluded.

As long ago as 1963, as a member of the Senate Appropriations Committee and the Senate Armed Services Committee, I vigorously supported the establishment of this installation.

As most of you know, the authorization for this station was initially denied, and the item was stricken from the Navy's military construction program for 1964. Knowing the potential value of a high-frequency radio receiving station in the National Radio Quiet Zone—an area encompassing about 10 counties in West Virginia—I sought the restoration of the project in the Armed Services Committee and was successful in having it restored for the Navy.

Four years ago, I had the pleasure of turning the first shovel of earth at the ground-breaking ceremony here. That shovel is on display in my office in Washington as a memento of the occasion, and along-side it is a model of a Wullenweber antenna which Admiral Weeks, the former Director of Naval Communications, kindly presented to me.

Two full-scale operational Wullenweber antennas are now installed just south of here at this station's operations site. It is my understanding that these antennas, together with their sophisticated switching systems, provide a significant new advancement—the ultimate at present—in radio reception capability. This capability is unmatched elsewhere in the Department of the Navy, the Department of Defense, or indeed, in any commercial or industrial complex.

Early reports on the operation of these antennas and associated devices verify and confirm the high expectations that were held from the beginning that such an installation would prove to be an invaluable asset to free-world communications.

This station—the only major military installation in West Virginia—is of great importance to the people of this state, and particularly to the people of Pendleton and surrounding counties.

At full complement, the station will have permanently assigned four officers and 104 enlisted personnel.

On a continuing basis it will also provide civilian jobs for at least 30 persons—almost one-and-a-half percent of the Pendleton County work force.

Beyond this direct addition, the requirements for goods and

services generated by the naval and civilian personnel working at this station, and their families, will aid to the business life of the area.

As the scope of operations here is expanded, this figure will increase, and it is difficult now to estimate the total benefit which this station will bring to the economy of West Virginia. I predict it will be substantial.

And so I share with all of you today a deep sense of pride in welcoming to our State this valuable addition to our Nation's defense facilities. It hardly seems possible that this installation, in such a peaceful and beautiful valley, plays a vital role in the control of our naval forces dispersed around the world.

Because of the tremendous political consequences of naval actions, it has become necessary for much of the command and control of fleet operations to emanate directly from Washington. In order for our national and military leaders to make correct and timely decisions, they must have accurate and detailed information on which to base these decisions.

This information will flow from our ships at sea, from our aircraft, and from our far-flung Naval Communications Stations around the world, through the radio receivers of this station, to the seat of government.

Such communications, sent and received through this network of Naval Communication Stations, provide the requisite command and control of our naval forces, thereby assuring the successful defense of our nation.

My fellow West Virginians and I extend a warm and sincere "welcome aboard" to this new Naval Radio Receiving Station, and our State is honored to have this distinguished assemblage here today.

Among the Directors of Naval Communications, I fully supported Admiral Roeder in his efforts to initiate this project; I continued my support to Admiral Weeks as the project progressed; and, to you, Admiral Fitzpatrick, I pledge my continuing support and reaffirm my interest in this project.

Finally, I note with pride that not only is West Virginia honored to have been selected for the location of this Naval Radio Receiving Station, but also that its first officer-in-charge, Lieutenant Commander Barrett, United States Navy, is a native West Virginian.

So, to Admiral Moorer, Admiral Roeder, Admiral Weeks, Admiral Fitzpatrick; to Commander Barrett, his crew, and the many, many others who have worked long hours over a long period of time to make this project a reality, I say, in the language of the Navy, "To All Hands, Well Done!"

To all of you, I add my sincere good wishes for the future.

Navy's 'Voice of Command' Station at Sugar Grove to Be Dedicated Saturday.

The newest link in the U. S. Navy's "voice of command", located in a remote West Virginia mountain area deep in the Allegheny ranges, will be activated on May 10 with formal dedication ceremonies at Naval Radio Station (R) Sugar Grove, placing this Naval Communications Command activity in a fully operational status.

The program will begin at 2 p.m. It will be open to the public, and guests are requested to be seated by 1:45 p.m.

West Virginia dignitaries scheduled to take part include U. S. Senator Robert C. Byrd and U. S. Representative Harley O. Staggers of the state's 2nd Congressional District. Senator Byrd will be principal speaker for the occasion. Others slated to attend as members of the official party are Admiral Thomas H. Moorer, USN, Chief of Naval Operations; Rear Admiral J. C. Dempsey, USN, Commandant, Fifth Naval District; Rear Admiral Francis J. Fitzpatrick, USN, Commander, Naval Communications Command; and Captain Maurice C. Hartle, USN, Commanding Officer of the station's parent command, Naval Communications

Station Washington, D. C.

The Sugar Grove station is an operational component of Naval Communication Station Washington. Headquarters at Cheltenham, Maryland, the parent station functions as a vital link between Navy operating forces and the hub of military activity in the Nation's Capital.

Radio receivers presently located at Cheltenham will be relocated to Sugar Grove, which is a quiet and isolated site, ideal for receiving high frequency radio signals. The new station is located in an officially designated National Radio Quiet Zone, an area 100 miles square, relatively free from outside electromagnetic interference.

The relocation plan also permitted partial use of Sugar Grove facilities originally designed for establishment of a 600-foot radio telescope. Work on this Naval Research Laboratory sponsored project was terminated in 1962 because of advances and refinements in related fields of science and technology. Following extensive engineering surveys conducted from 1962 to 1965, construction of the radio station began in March, 1965.

Barrett
The rural mountainous area to large cities that would cause radio frequency interference from industrial equipment and electrical devices. Harrisonburg, Va., with a population of about 15,000, is only 37 miles distant, but mountain ridges between the two locations provide natural radio interference "shielding." The area has no high-powered radio or TV stations and only a few electric power transmission lines. It is not crossed by commercial airways, thus eliminating interference from radar sites used in air traffic control. Heaviest traffic from trucks and buses with gasoline engines—major offenders in a radio quiet zone—is in the Shenandoah Valley, on the opposite side of the mountain range.

Radio quiet zone conditions at Sugar Grove permit the unprecedented utilization of two huge, circular Wullenweber antenna arrays, each 1,000 feet in diameter, as the station's main receiving antennas. Receiver facilities were used for the first time on December 26, 1968, when testing began. Receivers were disconnected at Cheltenham and moved to Sugar Grove

this spring.

Another unique feature of the station is a two-story operations building, completely underground. An existing underground structure was redesigned to house about 100 radio receivers and numerous ancillary devices, such as multicouplers, converters and switching matrices. The structure also includes a shop, a technical library and lounge areas, plus emergency messing and berthing facilities. It is fully equipped with environmental control devices and a carbon dioxide "flood" system fire protection.

The planned personnel complement at the station totals 138, including four Naval officers, 104 enlisted men and 30 civilians. Lieutenant Commander Lee E. Barret, Jr., USN, of Beckley, West Virginia, is Officer in Charge of the station. He will be relieved by Lieutenant Commander Clyde M. Conway, USN, later in May.

The Naval Radio Station at Sugar Grove is assigned to the command and support responsibility of Commander, Naval Communications Command, as delegated to him by the Chief of Naval Operations.

New Radio Link Opened in W. Va.

WASHINGTON — The newest link in the Navy's "voice of command" located in a remote West Virginia mountain area deep in the Allegheny ranges, was to be activated in mid-May with formal dedication ceremonies at Naval Radio Station Sugar Grove, placing this Naval Communications Command activities in a fully operational status.

West Virginia dignitaries scheduled to take part include Sen. Robert C. Byrd and Rep. Harley O. Staggers of the state's 2d Congressional District. Byrd will be principal speaker.

Others slated to attend are Adm. Thomas H. Moorer, Chief of Naval Operations; Rear Adm. J. C. Dempsey, Commandant, 5th Naval District; Rear Adm. Francis J. Fitzpatrick, Commander, Naval Communications Command; and Capt. Maurice C. Hartle, commanding officer of the station's parent command, Naval Communication Station, Washington, D.C.

Headquartered at Cheltenham, Md., the parent station functions as a link between Navy operating forces and the hub of military activity in the nation's capital.

RADIO RECEIVERS now located at Cheltenham will be relocated to Sugar Grove, which is a

quiet and isolated site, ideal for receiving high frequency radio signals. The new station is located in an officially designated National Radio Quiet Zone, an area 100 miles square, relatively free from outside electromagnetic interference.

The relocation plan also permitted partial use of Sugar Grove facilities originally designed for establishment of a 600 foot radio telescope. Work on this Naval Research Laboratory sponsored project was terminated in 1962 because of advances and refinements in related fields of science and technology. Following extensive engineering surveys conducted from 1962 to 1965, construction of the radio station began in March 1965.

Two huge, circular Wullenweber antenna arrays, each 1000 feet in diameter, will be the station's main receiving antennas. Receiver facilities were used for the first time on Dec. 26, 1968 when testing began. Receivers were disconnected at Cheltenham and moved to Sugar Grove this spring.

Another unique feature of the station is a two-story operations building, completely underground. An existing underground structure was redesigned to house about 100 radio receivers and other devices. The structure also includes a shop, a technical library and lounge areas, plus emergency messing and berthing facilities. It is fully equipped with environmental control devices and a carbon dioxide "flood" system for fire protection.

NAVY TIMES

MAY 21, 1969

W. Virginia Gets Navy Radio Site

SUGAR GROVE, W. Va. (AP) — The Navy activated a \$22.5 million global radio communications center here Saturday with a victory celebration rivaling the launching of a ship.

The round of speeches and fanfare culminated a controversy involving Congress and top Navy echelons when construction of a \$200 million radiotelescope here was abandoned in 1962.

The new installation — stepchild of the huge telescope — serves as the ears of an around-the-world radio communications system. It monitors high frequency message signals from ships at sea as well as from other Navy installations in the Atlantic Ocean and the Caribbean Sea.

The signals then are relayed 130 miles east to Cheltenham, Md., where they are processed for delivery.

It was moved here from the Navy's large communications facility at Cheltenham because this region — deep in the rugged Allegheny Mountains of eastern West Virginia — is relatively free from man-made interference.

But it didn't come without a struggle.

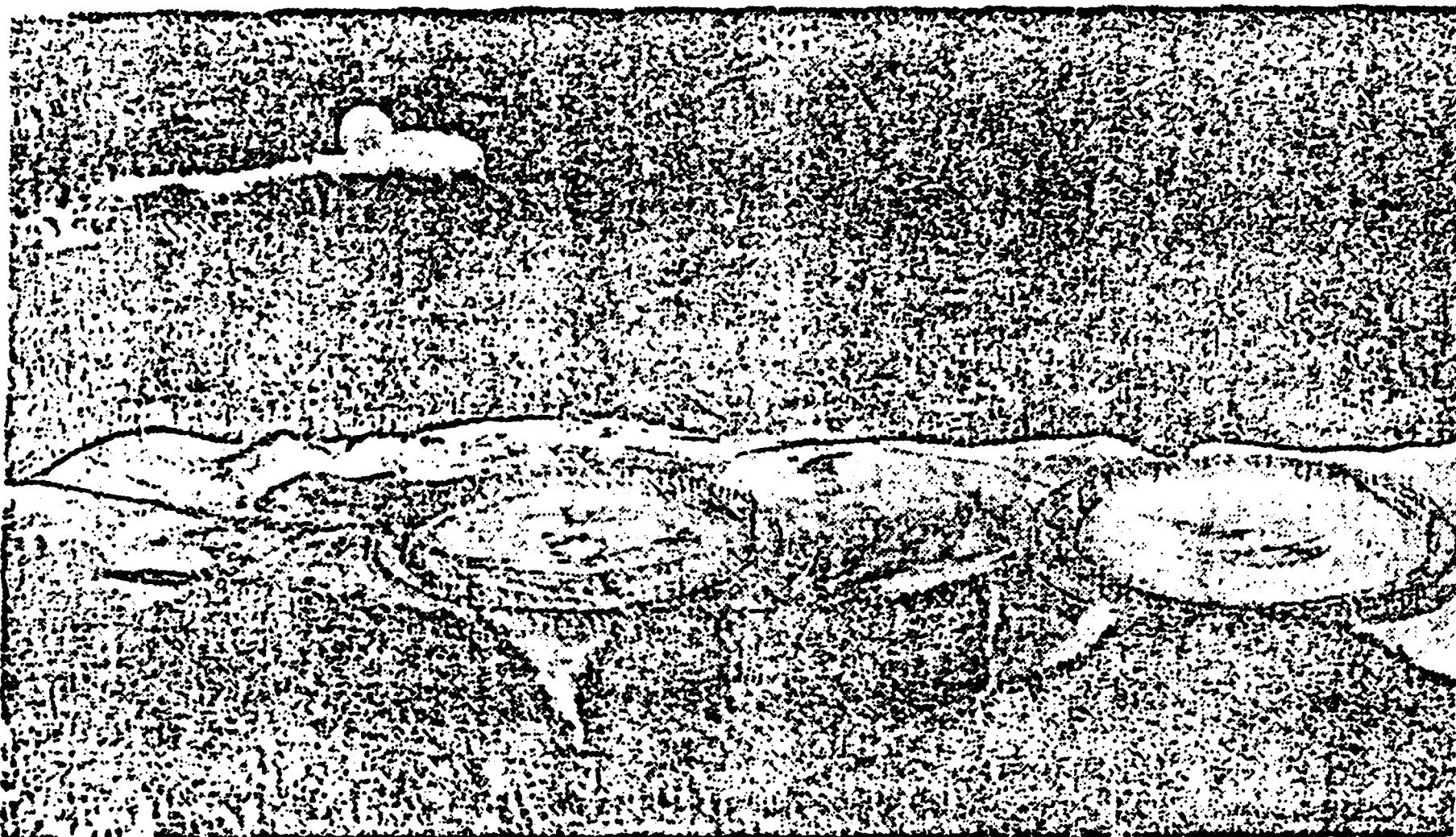
"I fought like the dickens, both to get it and keep it," said Sen. Robert C. Byrd, D-W.Va., at the ceremonies Saturday afternoon.

Byrd was among several dignitaries who praised the installation and its capabilities. Adm. Thomas H. Moorer, chief of naval operations, also addressed the audience of about 200 persons.

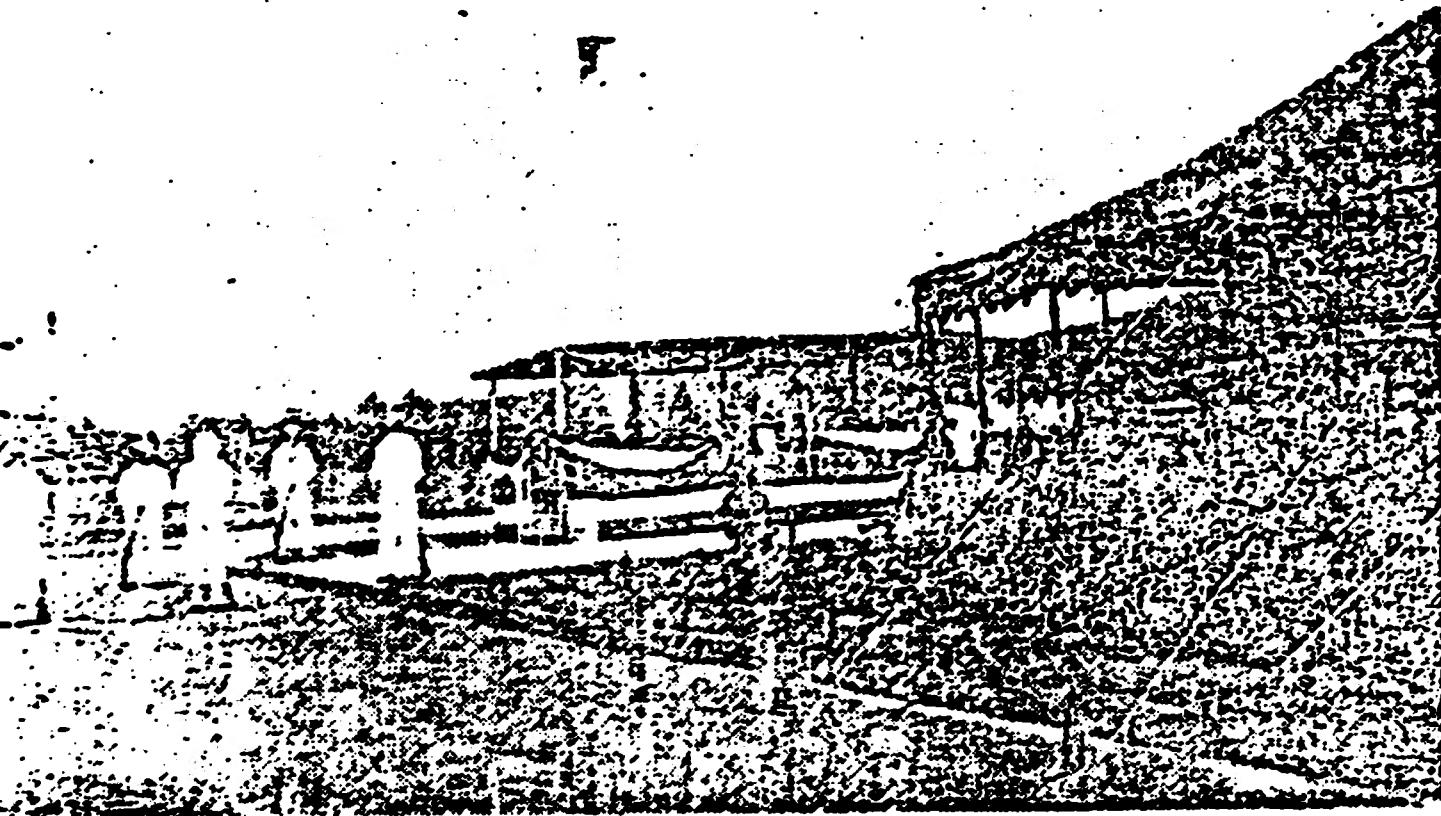
Associated Press

MONDAY, MAY 22, 1969

SUGAR GROVE NAVAL ST/



CIRCULAR ANT
bore, located on the
site of the Naval S
(R) Sugar Grove
1,000-foot diameter
er antennas, the m
antennas for the
two radio telescop
diameter and 60-fo
barely distinguishable
left, are being ope
Naval Research Lab
are not components
Radio Receiving St



Commenting on the effect the station will have on the local area, Byrd said this station—the only major military installation in West Virginia—is of great importance to the people of this state, and particularly to the people of Pendleton and surrounding counties.

"At full complement," the Senator stated, "the station will have permanently assigned four officers and 104 enlisted personnel. On a continuing basis it will also provide civilian jobs for at least 30 persons.

Benefit Difficult to Estimate

"As the scope of operations here is expanded, this figure will increase, and it is difficult now to estimate the total benefit which this station will bring to the economy of West Virginia. I predict it will be substantial."

Senator Byrd was introduced by Chief of Naval Operations Admiral Thomas H. Moorer who also spoke briefly concerning the importance of the Sugar Grove station.

Admiral Moorer remarked that while ships and airplanes have played the important roles in national defense in the past, he predicted that electronics, in which category the new Naval station is included, would be of chief importance in the next war.

The U. S. Navy Band played a number of selections preceding the program which began prom-

Captain Maurice C. Hartle, Commanding Officer, Naval Communications Station, Washington, gave a brief address of welcome, and Lt. J. D. Shannon, Chaplain, Naval Communications Station, Washington, pronounced the invocation and the benediction.

The Activation Order, which defines the function of the Sugar Grove station and authorizes its change to active status, was read by Rear Admiral J. C. Dempsey, Commandant Fifth Naval District, and LCDR Lee E. Barrett, Jr., officer in charge of the station, carried the order into effect by raising the American flag and the flag of the Chief of Naval Operations.

Tour Station

Following the program refreshments were served in the enlisted men's dining hall, and tours were conducted of the operations site.

The Naval Radio Receiving Station is located 19 miles east of Franklin, county seat of Pendleton County, and five miles north of Sugar Grove.

The station is located on two separate sites—a 400-acre operations site, and a 125-acre support site. The two sites are approximately seven miles apart.

Operational components of the station located on the operations site consist primarily of a bat-

tery of approximately 100 radio receivers with numerous ancillary devices and 10 antennas. Two of the antennas are huge, circular Wullenweber antenna arrays 1,000 feet in diameter which are the very latest development in antenna design and are being used for the first time at Sugar Grove. Other antennas include four conical monopoles and four rotatable log periodic antennas.

Located on the support site are a 70-man barracks, messing facilities, Navy exchange, movie area, administrative offices and 20 family housing units. Another 20 housing units are now under construction.

LCDR Lee E. Barrett, USN, of Beckley, is officer in charge of the station, and Lt. Raymond Duffey, USN, is assistant officer in charge. Barrett will be relieved later this month by LCDR Clyde W. Conway, USN.

ACTIVATION CEREMONY of the Naval Radio Station (R) Sugar Grove was colorful and informative. Held at the support site, the speaker's platform faced a large tent which sheltered approximately 400 dignitaries, guests and local residents attending the ceremony.



News-Record Photo

NAVY'S 'EAR' ACTIVATED — Lieutenant Commander Lee E. Barret Jr. (left), officer-in-charge of the Navy's \$11 million radio receiving station at Sugar Grove, W. Va., explains the station's operations to Admiral Thomas H.ousner (second from left), chief of naval operations, and

West Virginia Sen. Robert C. Byrd (right) following activation ceremonies Saturday afternoon. The facility will serve as the Navy's "ear" in gathering communications from its planes, ships and stations around the world.

Mountain Navy Station Formally Activated At Sugar Grove, W. Va.

By TOMMY THOMPSON
News-Record Staff Writer

SUGAR GROVE, W. Va. — The site of the country's "first mountaineer navy" was formal-

County residents, turned out to see the flag raised over the Naval Radio Station at Sugar Grove and tour the facility that will serve as the Navy's "ear." The center will gather communi-

ed fields of science and technology made it outdated before it was even completed.

The first facility was to have enabled Naval radio scientists to tune in on radio signals emit-

In welcoming the station to the state, the Senator pointed out that the 108 enlisted men and 30 officers stationed at Sugar Grove are the "country's first mountaineer navy."